

Rpt. 4b  
Date of writing report  
ADMIN  
Survey held at  
RECD.  
DEPT.

25th June, 1957

Received London

Port, Baltimore, Md.

No.

11729

In shops

4

7th Feb. 1957

6th Mar. 1957

No. of visits

5

First date

14 Jan. 1957

Last date

24 June, 1957

On vessel

# FIRST ENTRY REPORT ON INTERNAL COMBUSTION MACHINERY

No. in R.B. 25162 Name "PARADISE BEACH" Gross tons  
Transportation Co.  
Owners Messrs. Paradise Beach Managers  
Hull built at Lidinge By Gustafson & Anderson Varv. Port of Registry  
Yard No. 758 When launched 4-56  
Main Engines made at Peoria, Ill, U.S.A. By Caterpillar Tractor Co. Eng. No. 32B837 When 6-1956  
Gearing made at Peoria, Ill, U.S.A. By Caterpillar Tractor Co.  
Donkey boilers made at By Blr. Nos. When  
Machinery installed at Baltimore, Md. By Baltimore Marine Repair Shop When 6-57  
Particulars of restricted service of ship, if limited for classification Ferry Service in Nassau Harbour

Particulars of vegetable or similar cargo oil notation, if required None  
Is ship to be classed for navigation in ice? No Is ship intended to carry petroleum in bulk? No  
Is refrigerating machinery fitted? No If so, is it for cargo purposes? Type of refrigerant  
Is the refrigerating machinery compartment isolated from the propelling machinery space? Is the refrigerated cargo installation intended to be classed?

The following particulars should be given as fully and as clearly as possible. Where the answer is "No" or "None", say so! Ticks and other signs of doubtful meaning are not to be used. Where the wording is not applicable to the installation, a black line may be inserted. If the main engines have been constructed at another port and are covered by a separate report, the particulars given in that report need not be repeated below, but the port and report number should be stated.

No. of main engines 1 No. of propellers 2 Brief description of propulsion system 2 propellers 1 fwd. & 1 aft. shafting chain driven by main engines.

MAIN RECIPROCATING ENGINES. Licence Name and Type No. D. 342. Serial No. 32B837 caterpillar diesel engine

No. of cylinders per engine 6 Dia. of cylinders 5 3/4" stroke(s) 8" 2 or 4 stroke cycle 4 Single or double acting single

Maximum approved BHP per engine 153.9 at 1225 RPM of engine and 612.5 RPM of propeller.

Corresponding MIP 595 psi. (For DA engines give MIP top & bottom) Maximum cylinder pressure 800 p.s.i. Machinery numeral 31

Are the cylinders arranged in Vee or other special formation? vertical If so, number of crankshafts per engine 1

TWO STROKE ENGINES. Is the engine of opposed piston type? No If so, how are upper pistons connected to crankshaft?

Is the exhaust discharged through ports in the cylinders or through valve(s) in the cylinder covers? No. and type of mechanically driven scavenge pumps or blowers per engine and how driven

No. of exhaust gas driven scavenge blowers per engine Where exhaust gas driven blowers only are fitted, can the engine operate with one blower out of action?

If a stand-by or emergency pump or blower is fitted, state how driven No. of scavenge air coolers Scavenge air pressure at full power Are scavenge manifold explosion relief valves fitted?

FOUR STROKE ENGINES. Is the engine supercharged? No Are the undersides of the pistons arranged as supercharge pumps? No No. of exhaust gas driven blowers per engine No. of supercharge air coolers per engine Supercharge air pressure Can engine operate without supercharger?

FOUR STROKE ENGINES-GENERAL. No. of valves per cylinder: Fuel 1 Inlet 1 Exhaust 1 Starting 1 Safety

Material of cylinder covers Aluminum Material of piston crowns Aluminum Is the engine equipped to operate on heavy fuel oil? No.

Cooling medium for :-Cylinders fresh water Pistons Fuel valves Overall diameter of piston rod for double acting engines

Is the rod fitted with a sleeve? Is welded construction employed for: Bedplate? cast steel Frames? Entablature? cast steel Is the crankcase separated from the

underside of pistons? No Is the engine of crosshead or trunk piston type? trunk Total internal volume of crankcase No. and total area of explosion relief

devices Not fitted Are flame guards or traps fitted to relief devices? Is the crankcase readily accessible? Yes If not, must the engine be removed for

overhaul of bearings, etc? No Is the engine secured directly to the tank top or to a built-up seating? built up seating How is the engine started? by air motor

Can the engine be directly reversed? No If not, how is reversing obtained? by two (2) twin disc clutches.

Has the engine been tested working in the shop? Yes How long at full power? 4 hours Report No. 401.

CRANK & FLYWHEEL SHAFTING. Date of approval of torsional vibration characteristics of the propelling machinery system October 15 '56 State barred speed range(s), if imposed

for working propeller For spare propeller Is a governor fitted? Yes Is a torsional vibration damper or detuner fitted to the shafting? No.

Where positioned? Type No. of main bearings Are main bearings of ball or roller

type white metal Distance between inner edges of bearings in way of crank(s) 6 1/2" Distance between centre lines of side cranks or eccentrics of opposed piston engines

Crankshaft type: Built, semi-built, solid. (State which) solid forged steel

Diameter of journals 3.749" Diameter of crankpins Centre 3.625" Breadth of webs at mid-throw 5 3/4" Axial thickness of webs 1 5/8"

If shrunk, radial thickness around eyeholes Are dowel pins fitted? Crankshaft material Journals Pins 3 1/4" Minimum

Webs Tensile strength

Diameter of flywheel 24" Weight Are balance weights fitted? Total weight Radius of gyration

Diameter of flywheel shaft Same as crank shaft Material Steel Minimum approved tensile strength 40,000 p.s.i.

Flywheel shaft: separate, integral with crankshaft, integral with thrustshaft. (State which) Integral with crankshaft and thrust shaft.

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GENERAL REMARKS

State if the machinery has been constructed and/or installed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship and give recommendations for classification, including any special notation to be assigned. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.

The machinery not constructed after approved plans, but before being installed the main engine was completely opened up, and examined, the workmanship found good. These machinery items have been installed under my inspection and to my satisfaction. The workmanship and material used in the construction are good.

The machinery examined under working condition and satisfactory Bay trial carried out. The machinery is eligible in my opinion to have the notation of LMC (6-57).

Plans and certificates attached.

Starting air tank.

ME. Torsional Critical Speed Calculations, and Engine Test Date.

ME. Arrangements.

ME. Chain Drive Link Belt.

ME. Crankshaft Physical Test Report.

Analysis Report of steel used for ME. chain drive shaft.

*[Signature]*

Engine Surveyor to Lloyd's Register of Shipping.

PARTICULARS OF IDENTIFICATION MARKS ((Including Port of origin) of important Forgings and Castings. (Copies of certificates should be forwarded with report.)

RODS 7B 6225

CRANKSHAFT OR ~~ROTORSHAFT~~ 4 H7032

FLYWHEEL SHAFT same

THRUSTSHAFT same

GEARING -

INTERMEDIATE SHAFTS -

SCREW AND TUBE SHAFTS -

PROPELLERS -

OTHER IMPORTANT ITEMS -

Is the installation a duplicate of a previous case? No

If so, state name of vessel

Date of approval of plans for crankshaft

Straight shafting

Gearing

Clutch

Separate oil fuel tanks

Pumping arrangements

Oil fuel arrangements

Cargo oil pumping arrangements

Air receivers New York, 3rd April, 1957

Donkey boilers

Dates of examination of principal parts:-

Fitting of stern tube

Fitting of propeller

Completion of sea connections

Alignment of crank shaft in main bearings

Engine chocks & bolts 5 June, 1957

Alignment of gearing

Alignment of straight shafting

Testing of pumping arrangements

Oil fuel lines

Donkey boiler supports

Steering machinery

Windlass

Date of Committee

NEW YORK

OCT 11 1960

Special Survey Fee

\$275.00

Decision

See Lm 315

Expenses

\$ 16.50

Date when A/c rendered

March 10, 1959



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